

**REMARKS**

Reconsideration and allowance of this application is respectfully requested in light of the foregoing amendments and the following remarks.

**The Claims**

Claims 4, 5, and 8-13 are pending. Claims 1-3 and 6-7 are cancelled. Claims 4, 5, and 8-10 are amended. Claims 12-13 are added. Support for Claim 12 is found in the specification at page 3, lines 20-21. Support for Claim 13 is found in the specification at page 6, footnotes 1 & 2 to Table 1 and the attached Product Specification sheets.

**Objection to Specification (Rule 75(d)(i))**

The specification has been objected to for failing to provide antecedent basis for Claim 9, an original claim. The specification is amended at page 3. Support for the amendment is found in Claim 9 and at page 3. This objection is overcome.

**Section 112 Rejection**

Claim 9 has been amended to overcome the rejection set forth in paragraph 5, page 3 of Paper No. 16. This rejection is now overcome.

Section 102 Rejection

The invention is rejected, as anticipated, over Japanese Publication 11-240970 (Nitto Denko) and U.S. 5,922,492 (Tonen). Applicant traverses those rejections.

Nitto Denko discloses a separator made from a mixture of a polyolefin and a "substance...incompatible with the polyolefin." See Abstract, Claim 1, paragraphs 0009 and 0015. The polyolefin is not high density polyethylene (HDPE). See paragraph 0023.

The invention, as described in Claim 9, recites HDPE and PE wax. Since Nitto Denko does not mention HDPE, it cannot anticipate the claims.

Moreover, Nitto Denko will not obviate the claims. First, Nitto Denko requires that the polyolefin and the substance be incompatible. See their explanation at paragraphs 0011-0013. Second, note in Comparison Examples 1-2, HDPE/PE wax blends did not shutdown. Nitto Denko defines shutdown as when the electrical resistance of the membrane exceeds 200 ohm-cm<sup>2</sup>. See paragraph 0057. Comparative Examples 1-2 never reached that value, see the Table SD electrical resistance (b) - CE1=12.7; CE2=10.2. Accordingly, those separators did not shutdown. If the separators did not shutdown, a skilled man would not be guided by this

teaching to make the instant invention. Accordingly, Nitto Denko cannot obviate the claimed invention.

Tonen discloses a composite membrane that is used as a separator. The composite membrane has a microporous membrane laminated to a nonwoven fabric. See Abstract. Assuming for argument sake that the nonwoven fabric may be simply ignored, the remaining microporous membrane comprises a matrix component and a shutdown component (deemed optional). Column 3, lines 40-41. The matrix component must have a molecular weight of  $5 \times 10^5$  or more, and cannot have a molecular weight of less than  $5 \times 10^5$ . Column 3, lines 41-49. Therefore, Tonen does not disclose HDPE.

The invention, on the other hand, is a blend of HDPE and a wax. HDPE is known to have a molecular weight no greater than 500,000 ( $5 \times 10^5$ ), as discussed in Applicant's previous amendment and in Paper No. 16. The HDPE disclosed by Applicant is set forth at page 6, in Table 1. One HDPE is a Fina product denoted 7208 and the other an Exxon product denoted 7845. The product specification sheets for both are attached. Both have densities less than 0.965. Accordingly, the invention distinguishes Tonen.

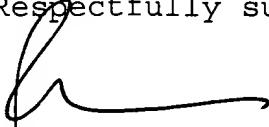
Moreover, Tonen does not obviate the invention. Tonen specifically states that the matrix component cannot have a molecular weight less than  $5 \times 10^5$ . To change Tonen would require

modifying the invention against the teachings of the inventor. That is improper. Accordingly, Tonen cannot obviate the claimed invention.

Conclusion

In view of the foregoing, Applicant respectfully requests an early Notice of Allowance in this application.

Respectfully submitted,



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